



**ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
FEBRUARY 7, 2005 – 9:00 A.M.
AERONAUTICS COMMISSION ROOM**

Present: L. Tibbits J. Friend J. Polasek
B. O'Brien J. W. Reincke M. VanPortFleet
J. D. Culp A. Clover T. Fudaly
C. Bleech E. Burns

Absent: M. Chaput

Guests: B. Krom P. Corlett M. Bott
J. Townsend B. Zimmerman T. Anderson (For M. Chaput)

OLD BUSINESS

1. Approval of the Minutes of the December 7, 2004, Meeting – L. Tibbits

The minutes of the December 7, 2004, meeting were approved.

2. Guidelines for the Use and Operation of Pedestrian Signals (See December 7, 2004, Minutes, New Business, Item 2) – M. Bott and P. Corlett

The committee approved in concept the Guidelines for the Use and Operation of Pedestrian Signals, subject to the following recommended touchups.

- Under the “Audible Pedestrian Signals” section, remove the point system. The criteria will be listed (without points) as things to consider when applying the devices.
- Under the “Countdown Pedestrian Signals” section, clarify how the devices can be installed prior to the completion of the research project. (For example, they will be permitted, however the local agency takes on the cost of design, purchase and installation. If in the future the research project identifies the location as having been a candidate, those costs already incurred will not be reimbursed.)

3. Establishing Speed Limits for Work Zones (See October 7, 2004, Minutes, Old Business, Item 3) – B. Zimmerman

Draft BOH IM 2005-B, Guidelines to Establish Speed Limits in Work Zones, was written and sent out for region review. The comments generated by the region review were distributed to the committee. The committee tabled this item until the March meeting. The current draft of the IM will go to the Traffic Recommendation Committee for review and comment, and guidance on the implementation rollout.

NEW BUSINESS**1. Pavement Selection, I-75 Reconstruction: CS 49025, JN 75291 – B. Krom**

The reconstruction alternates considered were: Alternate 1 – hot mix asphalt (HMA) pavement (Equivalent Uniform Annual Cost [EUAC] \$37,033/directional mile), and Alternate 2 - jointed plain concrete pavement (JPCP) (EUAC \$39,376/directional mile).

A life cycle cost analysis was performed and Alternate 1 was approved based on having the lowest EUAC. The HMA pavement design and cost analysis are as follows:

2.0" (50.8mm).....	HMA, 5E10, Top Course (Mainline & Shoulder)
2.5" (63.5mm).....	HMA, 4E10, Leveling Course (Mainline & Inside Shoulder)
3.1" (78.7mm).....	HMA, 3E10, Base Course (Mainline)
3.5" (88.9mm).....	HMA, 13A (Outside Shoulder)
8.0" (203.2mm).....	Aggregate Base, 21AA (Mod) (Mainline & Inside Shoulder)
11.1" (281.9mm).....	Aggregate Base, 21AA (Mod) (Inside Shoulder)
12.1" (307.3mm).....	Aggregate Base, 21AA (Mod) (Outside Shoulder)
12" (304.8mm).....	Sand Subbase
	Underdrain System
27.6" (701.0mm).....	Total Thickness

Present Value Initial Construction Costs	\$493,221/directional mile
Present Value Initial User Costs	\$4,509/directional mile
Present Value Maintenance Costs.....	\$100,656/directional mile
Equivalent Uniform Annual Cost	\$37,033/directional mile

2. Proposal for a Pilot Project on the use of Countdown Pedestrian Signals – M. Bott and P. Corlett

Following are suggested edits to the proposed research plan:

Phase I.1.: Clarify that statewide 17 locations have been identified for study locations.

Phase II.1.: Add – “Based on the guidelines in Phase I, identify other locations . . .”

The Traffic and Safety Support Area will secure background data at the identified 17 locations. The researcher and will analyze intersection conditions for each location with traditional pedestrian indications.

The Traffic and Safety Support Area plans to have the countdown pedestrian signals installed at the 17 study locations during 2005.

The researcher will develop the initial guidelines, which Traffic and Safety will bring back to EOC in July 2006.

3. Geometric Design Guides – I. Gedaoun and J. Townsend

The committee approved revisions to the GEO-370-C Rural Ramp Terminal Details, and GEO-680-A Commercial Driveways geometric design guides. The revisions reflect current design practices. The two new guides will be effective as of the October 2005 letting. The committee also approved the deletion of VII-700 and G-700 Stopping Sight Distance, and VII-710 and G-710 Passing Sight Distance. The *2001 AASHTO Green Book* will be used for this information.

4. Adoption of Jointed Plain Concrete Pavement (JPCP) as MDOT's Standard Concrete Pavement Type – C. Bleech

Adopt JPCP as MDOT's standard with the following action plan:

- A. Revise the most current JPCP cross section to address base support needs.
- B. Develop and implement life cycle cost schedules based upon all JPCPs that have been constructed to date.
- C. Separate the currently combined JRCP/JPCP life cycle cost schedules into their respective pavement types based on the latest information in Michigan.
- D. Develop criteria for use of high performance concrete (Grade P1 Modified) for JPCP construction.
- E. Update the initial pavement acceptance special provision for JPCP construction.
- F. Reclassify the JRCP pavement type standard plan and details to special detail status.

ACTION: EOC approved.

(Signed Copy on File at C&T)

André Clover, Acting Secretary
Engineering Operations Committee

AC:kar

cc:	G. J. Jeff	S. Mortel	J. Steele (FHWA)
	K. Steudle	D. Jackson	R. Brenke (ACEC)
	L. Hank	W. Tansil	G. Bukoski (MITA)
	EOC Members	D. Wresinski	R. J. Risser, Jr. (MCPA)
	Region Engineers	C. Libiran	D. Hollingsworth (MCA)
	TSC Managers	R. J. Lippert, Jr.	J. Becsey (MAPA)
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	T. Kratofil	T. Phillips	C. Mills (MPA)
	M. DeLong	K. Peters	J. Murner (MRPA)
	B. Kohrman	J. Ingle	
	J. Shinn	C&T Staff	